

IN THE CLAIMS:

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 3-5, 7, 9-10, and 12-14 without prejudice or disclaimer, and AMEND claims 1-2, 6, 11, and 15-18 in accordance with the following:

1. (currently amended) A computer virus infection information providing method for detecting a computer virus in information transmitted between a terminal apparatus and a central apparatus and providing infection information concerning the detected computer virus, the method ~~comprising the steps of:~~

installing anti-virus software on the central apparatus;
storing a communication history of the terminal apparatus;
registering a time of find-out, which is a time when the computer virus was found out;
specifying ~~a~~the time of infection of the terminal apparatus based on the stored communication history, the registered time of find-out, and a time of installation of the anti-virus software, in response to detection, by the installed anti-virus software, of ~~thea~~a computer virus in information transmitted from the terminal apparatus to the central apparatus ~~by the installed anti-virus software;~~

specifying a route of infection of the computer virus based on the stored communication history and the time of installation of the anti-virus software;

transmitting the infection information, including the specified time of infection and the specified route of infection, from the central apparatus to the terminal apparatus; and

displaying the transmitted infection information by using the terminal apparatus.

2. (currently amended) A computer virus infection information providing system for detecting a computer virus and providing infection information concerning the detected computer virus, comprising:

a central apparatus; and

a terminal apparatus connected to the central apparatus via a communication network;

wherein the central apparatus includes a processor capable of performing operations of:

installing anti-virus software;

storing a communication history of the terminal apparatus;

registering a time of find-out, which is a time when the computer virus was found out;

specifying ~~at~~ the time of infection of the terminal apparatus based on the stored communication history, the registered time of find-out, and a time of installation of the anti-virus software, in response to detection, by the installed anti-virus software, of a computer virus in received information transmitted from the terminal apparatus ~~by the installed anti-virus software;~~

specifying a route of infection of the computer virus based on the stored communication history and the time of installation of the anti-virus software; and

transmitting the infection information, including the specified time of infection and the specified route of infection, to the terminal apparatus, and wherein the terminal apparatus includes a processor capable of performing the operation of displaying the transmitted infection information.

3. (cancelled)

4. (cancelled)

5. (cancelled)

6. (currently amended) A computer virus infection information providing system according to claim 23, wherein the processor of the central apparatus is further capable of performing an operation of transmitting the installed anti-virus software to a predetermined terminal apparatus,

wherein the processor of the terminal apparatus is further capable of performing operations of:

installing the transmitted anti-virus software;

storing an execution history of the installed anti-virus software; and

transmitting the stored execution history to the central apparatus when a computer virus is detected by the anti-virus software, and

wherein the processor of the central apparatus is further capable of performing the operations of:

specifying the time of infection based on the transmitted execution history and the registered time of find-out;

specifying the route of infection of the computer virus based on the transmitted execution history; and

transmitting the infection information including the specified time of infection and the specified route of infection, to the terminal apparatus.

7. (cancelled)

8. (original) A computer virus infection information providing system according to claim 2, wherein the processor of the central apparatus is further capable of performing an operation of transmitting advertising information concerning the anti-virus software to the terminal apparatus when a computer virus is detected by the anti-virus software.

9. (cancelled)

10. (cancelled)

11. (currently amended) An infection information providing apparatus for detecting a computer virus in transmitted and received information and providing infection information concerning the detected computer virus, comprising a processor capable of performing operations of:

installing anti-virus software;

storing communication history of the information;

registering a time of find-out, which is a time when the computer virus was found out;

specifying at the time of infection of a terminal apparatus based on the stored communication history, the registered time of find-out, and a time of installation of the anti-virus software, in response to detection, by the installed anti-virus software, of thea computer virus in received information ~~by the installed anti-virus software;~~

specifying a route of infection of the computer virus based on the stored communication history and the time of installation of the anti-virus software; and

transmitting the infection information, including the specified time of infection and the specified route of infection, to the outside.

12. (cancelled)

13. (cancelled)

14. (cancelled)

15. (currently amended) A computer memory product readable by a computer and storing a computer program for detecting a computer virus in transmitted and received information and providing infection information concerning the detected computer virus, the computer program comprising the steps of:

storing a communication history of the information;~~and~~
registering a time of find-out, which is a time when the computer virus was found out;
specifying ~~a~~the time of infection of a terminal apparatus based on the stored communication history, the registered time of find-out, and a time of installation of anti-virus software, in response to detection, by the anti-virus software, of ~~the~~a computer virus in received information ~~by anti-virus software; and~~
specifying a route of infection of the computer virus based on the stored communication history and the time of installation of the anti-virus software.

16. (currently amended) A computer virus infection information providing system for detecting a computer virus and providing infection information concerning the detected computer virus, comprising:

a central apparatus; and
a terminal apparatus connected to the central apparatus via a communication network;
wherein the central apparatus includes:
means for installing anti-virus software;
means for storing a communication history of the terminal apparatus;
means for registering a time of find-out, which is a time when the computer virus was found out;
means for specifying ~~a~~the time of infection of the terminal apparatus based on the stored communication history, the registered time of find-out, and a time of installation of the anti-virus software, in response to detection, by the installed anti-virus software, of a computer virus in information transmitted from the terminal apparatus to the central apparatus ~~by the installed anti-virus software;~~

means for specifying a route of infection of the computer virus based on the stored communication history and the time of installation of the anti-virus software; and
means for transmitting the infection information, including the specified time of infection and the specified route of infection, to the terminal apparatus; ~~and~~
wherein the terminal apparatus includes
means for displaying the transmitted infection information.

17. (currently amended) An infection information providing apparatus for detecting a computer virus in information transmitted to and received from the outside and providing infection information concerning the detected computer virus, comprising:

means for installing anti-virus software;
means for storing a communication history of the information;
means for registering a time of find-out, which is a time when the computer virus was found out;
means for specifying ~~at~~ the time of infection of a terminal apparatus based on the stored communication history, the registered time of find-out, and a time of installation of the anti-virus software, in response to detection, by the installed anti-virus software, of a computer virus in the information received from the outside ~~by the installed anti-virus software;~~
means for specifying a route of infection of the computer virus based on the stored communication history and the time of installation of the anti-virus software; and
means for transmitting the infection information, including the specified time of infection and the specified route of infection, to the outside.

18. (currently amended) A computer virus infection information providing method for detecting a computer virus in information transmitted between a client and a server and providing infection information concerning the detected computer virus, comprising:

installing anti-virus software on the server apparatus;
detecting the virus and specifying a time of detection;
storing a communication history of the client apparatus;
specifying a time of infection based on the time of detection, a time of installing the anti-virus software, and the stored communication history when the virus is detected by the installed anti-virus software;
specifying a route of infection of the computer virus based on the stored communication history and the time of installing the anti-virus software;

transmitting the infection information, including the specified time of infection and the specified route of infection, from the server to the client; and
displaying the transmitted infection information at the client.